ENVIRONMENTAL CHEMISTS

Date of Report: April 7, 1997 Date Received: April 3, 1997

Project: Metro Self Monitor, PO #56763 Date Samples Extracted: April 3, 1997 Date Extracts Analyzed: April 3, 1997

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC **USING METHOD 6010**

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
M56763	0.95	0.76	1.1	0.08
Method Blank	<0.05	<0.05	< 0.05	< 0.05

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Project: Metro Self Monitor, PO #56763

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 76910 (Duplicate)

	Reporting	Sample	Duplicate	Relative Percent	Acceptance
Analyte:	Units	Result	Result	<u>Difference</u>	<u>Criteria</u>
Chromium	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Copper	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Nickel	mg/L (ppm)	< 0.05	< 0.05	nm	0-20
Zinc	mg/L (ppm)	< 0.05	<0.05	nm	0-20

Laboratory Code: 76910 (Matrix Spike)

	Reporting	Spike	Sample	%]	Recovery	Acceptance	Relative Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	<u>Difference</u>
		Maria Austra					
Chromium	mg/L (ppm)	5	< 0.05	103	103	80-120	0
Copper	mg/L (ppm)	5	< 0.05	103	103	80-120	0
Nickel	mg/L (ppm)	10	< 0.05	103	102	80-120	1
Zinc	mg/L (ppm)	5	< 0.05	101	102	80-120	1

Laboratory Code: Spike Blank

	Reporting	Spike	%]	Recovery	Acceptance	Relative e Percent
Analyte:	Units	Level	MS	MSD	Criteria	Difference
Chromium	mg/L (ppm)	5	110	113	80-120	3
Copper	mg/L (ppm)	5	112	113	80-120	1
Nickel	mg/L (ppm)	10	109	112	80-120	3
Zinc	mg/L (ppm)	5	106	110	80-120	4

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

SAMPLE CHAIN OF CUSTODY

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

April 7, 1997

INVOICE # 97ACU0407-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO #56763: Results of testing requested by Gerry Thompson, Project Manager for material submitted on April 3, 1997.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due

\$ 65.00

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Beth M. Albertson, M.S. Bradley T. Benson Kelley Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

April 7, 1997

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 3, 1997 from your Metro Self Monitor, PO #56763 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson

Chemist

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